

Scenarios of WOTUS in SCOTUS

What will a Supreme Court Decision on “Waters of the United States” Mean for Wetlands, Streams, and the Restoration Economy?

KEY TAKE-AWAYS:

- In [Sackett v EPA](#), a likely scenario is that SCOTUS will side with the plaintiff. This means that non-perennial streams and non-surface water connected wetlands will no longer have federal protections. This scenario would affect arid states the most, where 80% of streams are non-perennial.
- 14% of permits (by count) and 42% percent of impacts by linear feet of streams would no longer require federal authorization, based on an analysis of Section 404 permit data.
- Waters that lose federal protection could still be protected by states. 19 states already have protections greater than federal protections and will see less impact.
- The patchwork of regulations by state will create challenges for companies working across states.

The Supreme Court of the United States (SCOTUS) has been quite busy lately, with ripples felt in the environmental world with the decision in June limiting the EPA’s ability to regulate carbon emissions from electric power plants ([West Virginia vs EPA](#)). **Wetlands and streams are up next**, as SCOTUS will hear [Sackett v EPA](#) on October 8th to rule on just what constitutes Waters of the United States (WOTUS).

WOTUS is a jargon-y term describing the extent of the federal protections of wetlands, streams, rivers, and lakes across the US. It has huge implications for the [public](#), the regulated community, and the [restoration economy](#). When SCOTUS makes its decision on WOTUS, there will certainly be hyperbole in the headlines. However, it’s worth having a level-headed discussion of the possible outcomes that could come in October, and diving into what those scenarios would mean on the ground.

This report provides background on Sackett v EPA, potential scenarios, effects on aquatic resources, results of an analysis on Section 404 permitting, a high level review of state wetland law, and commentary on the impact on the \$9.5 billion restoration economy (BenDor et al., 2015).

Background on Sackett v EPA

The Supreme Court [will hear oral arguments](#) on *Sackett v EPA* on October 3rd, 2022. The case stems from [Idaho landowners](#) wanting to build on their property and questioning whether the federal government was overstepping in its interpretation of WOTUS and what requires a Clean Water Act section 404 permit. SCOTUS will review “the proper test for determining whether wetlands are [WOTUS]” which relates to a previous Supreme Court case, *Rapanos v EPA*, which had a 4-1-4 split. Since *Rapanos* was inconclusive, it was up to EPA and the US Army Corps of Engineers (USACE) to decide and in 2008 the agencies adopted **Justice Kennedy’s test of WOTUS**: if a wetland had a “significant nexus,” or a physical, chemical, or biological connection to a navigable water or relatively permanent tributary to a navigable water, it was WOTUS. This “Post-*Rapanos*” WOTUS definition includes navigable waters (rivers, lakes, some streams), wetlands adjacent to navigable waters, non-navigable tributaries that flow relatively permanently (e.g., 3 months of the year), and wetlands adjacent to said tributaries. The plurality opinion of *Rapanos*, authored by **Justice Scalia, provides an alternative test**: if a water or wetland had surface water connection and had continuous flow to a navigable water, it was WOTUS. The Sacketts in *Sackett v EPA* want the Court to adopt the plurality opinion/Scalia test of WOTUS. That is, they want the definition of WOTUS to include only those waters with a surface connection and continuous flow to navigable water.

Will SCOTUS Gut the Clean Water Act?

Even a ruling limiting the scope of the Clean Water Act federally does not mean there will be no protections for rivers, lakes, wetlands, and streams. Potential scenarios for *Sackett v EPA* are the following:

1. The Supreme Court will dismiss the case

The Supreme Court will dismiss the case in deference to the Biden Administration’s [ongoing rulemaking](#) on WOTUS (set for [August 2022](#)), and WOTUS will either be as protective as it is today or more so. This is the scenario with the most federal protections for aquatic resources, but the **least likely** to happen. We are not aware of anyone predicting this outcome. It is more likely that the Court will make a ruling that is relevant to the Administration’s rulemaking, and EPA and USACE “may need to consider the Court’s interpretation in their regulations” ([CRS, 2022](#)).

2. The Supreme Court will adopt the plurality / Scalia opinion from *Rapanos v EPA*.

Navigable rivers and lakes, tributaries with continuous surface water connections, and wetlands adjacent to those that have a surface water connection will retain federal protection. Intermittent and ephemeral streams and wetlands without surface water connection and continuous flow will likely lose federal protection. This is the scenario with the least federal protections, and **the scenario most likely to happen**.

“You’ve got five, if not six, justices now who are willing to say that the Scalia test is the proper test. I think there’s a very high likelihood that’s what the Supreme Court will do here.”

—Mark Ryan, EPA Office of Water attorney ([Greenwire, 1/24/2022](#))

Several mitigation bankers we spoke to predicted WOTUS would resemble the Trump-era Navigable Waters Protection Rule (NWPR). The difference between scenario #2 above and NWPR is that scenario #2 is even less protective than NWPR, as NWPR includes intermittent rivers and intermittent streams that contribute surface flow to traditional navigable waters in a typical year, and wetlands and floodplain areas such as oxbows that are flooded in a typical year by a WOTUS.

Ephemeral and Intermittent Streams and Some Wetlands Will Lose Federal Protection

The biggest impact of the likely post-ruling scenario (#2 above) is the loss of ephemeral and intermittent streams. Non-surface water connected wetlands also lose protection, although “isolated wetlands” had already been exempt from WOTUS in past definitions. Ephemeral and intermittent streams make up over half of all streams in the United States (excluding Alaska), and over 81% in the arid and semi-arid Southwest ([US EPA, 2008](#), [Fresenmyer et al., 2020](#)).

We wanted to know **what could be the scale of impacts permitted and mitigated of ephemeral and intermittent streams and wetlands without surface water connections** to understand the proportion of impacts to these areas as compared to other streams and wetlands. Do these waters make up a lot of what is impacted and mitigated under CWA Section 404 or not very much? To understand this, we analyzed five years of USACE permitting data, obtained from the ORM2 database (Operation and Maintenance Business Information Link, Regulatory Module) through a Freedom of Information Act submitted by the Environmental Restoration Business Association ([ERBA](#)). The data contains a field that indicates the [Cowardin classification](#) of the aquatic resource, which includes categories indicating intermittent and ephemeral streams. Our data did not include an indication of non-adjacent wetlands, so we could only analyze impacts to stream permitting and mitigation. After filtering out permits for restoration work, and non-404 permits we analyzed the data at a national level.

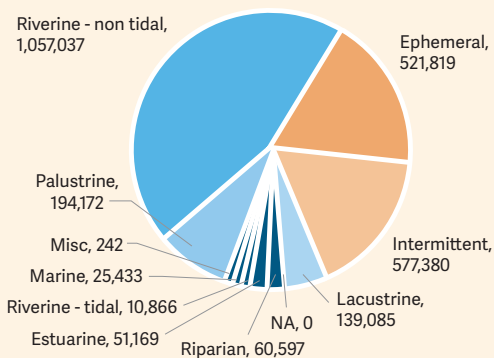
There are an average of 88,000 Clean Water Act Section 404 permits for impacts to aquatic resources annually, with about 12,000 (14%) of those permits for ephemeral and intermittent streams. In other words, intermittent and ephemeral stream permits are a small but not insignificant proportion of permits overall.

Authorized impacts to intermittent and ephemeral streams total **1.38 million linear feet (260 miles)** and 1,300 acres (not overlapping) per year on average.

For scale, the length of ephemeral and intermittent stream impacts is about the distance from Los Angeles to Las Vegas, and the area is about 1.5 times the size of Central Park. A portion of these impacts (roughly 1/3) are temporary.

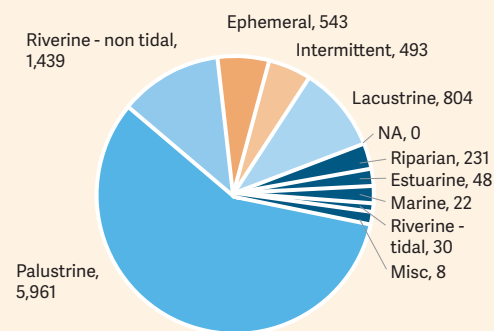
The orange areas in the figures indicate the scale of loss of federal protection of intermittent and ephemeral streams (e.g., they would no longer need a federal 404 permit). Fourteen percent of permits (by count), and **42% percent** of all permitted impacts by linear feet, **and 11% of impacts by acre** would no longer require federal authorization. Although this is not a comprehensive analysis (e.g., it does not include the impact to non-adjacent wetlands), it sheds light on the scale of loss of protection under a post-SCOTUS scenario #2. Impacts will not be uniform across states—due both to ecological factors as well as state wetland law (see below).

Average Linear Feet of Authorized Impacts Annually



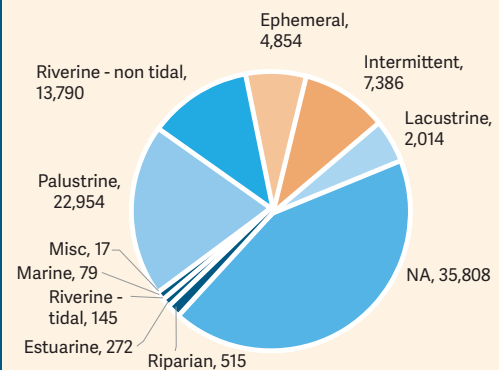
Average linear feet of impacts authorized annually, by Cowardin classification

Average Acres of Authorized Impacts Annually



Average acreage of impacts authorized annually, by Cowardin classification

Average Number of Permits Annually



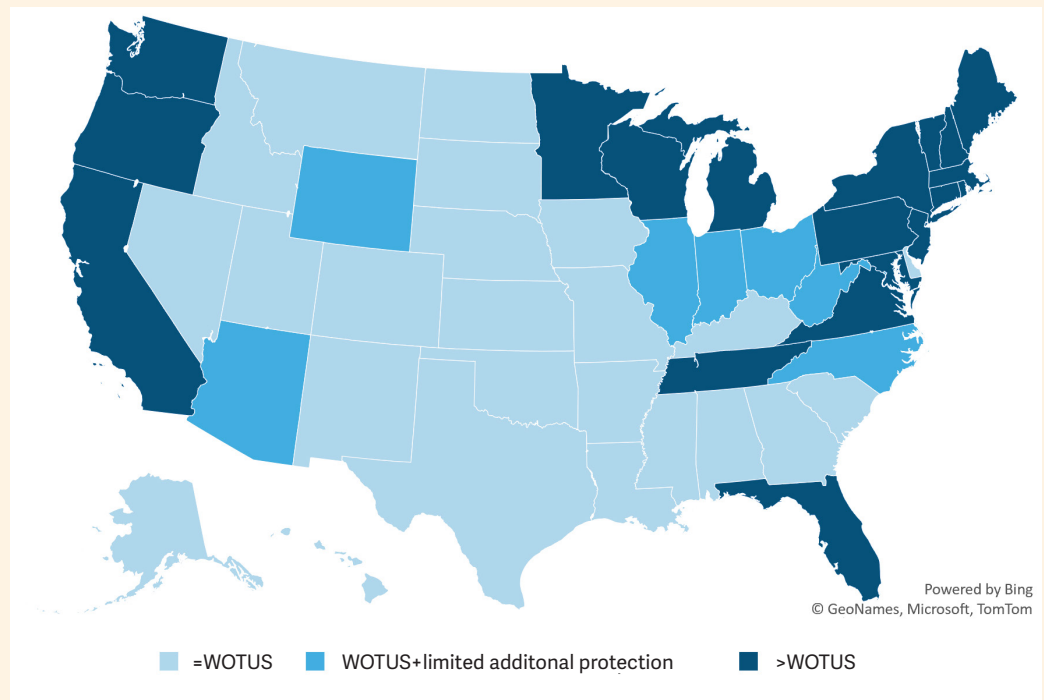
Average number of permits authorized annually, by Cowardin classification

A June 2021 [EPA memorandum](#) discussing the effects of implementing the Trump-era NWPR (a coarse proxy for a likely SCOTUS scenario) noted:

“Of particular concern to the agencies is the NWPR’s disproportionate effect on arid regions of the country. The Corps’ data show that in New Mexico, of the 258 streams assessed in AJDs approved jurisdictional determinations, or decisions on whether an aquatic resource is WOTUS], 100% were found to be non-jurisdictional ephemeral resources. In Arizona, of the 1,284 streams assessed in AJDs, 1,280, or 99.6%, were found to be non-jurisdictional ephemeral resources.”

The State Patchwork of Wetland Law—Added Complexity, Added Protection (in some cases)

The story doesn’t stop with changes in federal protections of wetlands and streams. The map below is based on an [analysis](#) of which states had greater protections than the Trump era NWPR. There are a number of states that already have state protections that exceed those of the CWA and would not lose protections of aquatic resources (19 states, in dark blue), while other states would lose protections (lightest blue). Some states (medium blue) provide limited regulation greater than the Feds. States may be considering increasing or decreasing protections based on political will. Developing or expanding permitting at the state level will require leadership support (state agency leads are political appointees), appropriations, staffing and more—these things take time and aquatic resources could degrade in the interim.



A patchwork of state-level protections, with some states that expand or contract protection with changes in the federal definition of WOTUS (= WOTUS), states that have limited additional protections (WOTUS +), and states that have comprehensive protections greater than WOTUS (> WOTUS). Based on ELI, 2022.

What Could be the Impact to the Restoration Economy?

The [restoration economy](#) is a sector [estimated](#) to directly employ 126,000 and generate \$9.5 billion in sales annually, as well as providing significant indirect jobs and economic output (95,000 jobs, and \$15 billion, respectively). To compare this with other domestic resource-intensive industries, iron and steel mills employ 91,000 people, coal mining employs 79,000, and logging employs 54,000. Jobs in the ecological restoration industry are often in rural and economically depressed areas and have wages higher than local averages ([Davis et al., 2011](#); [Shropshire & Wagner, 2009](#); [TNC and NOAA, 2012](#)).

How does a SCOTUS decision impact the restoration economy? The impact will be variable, depending on state regulations. Several mitigation bankers anonymously noted that internal analyses **projected an impact of 10–15% of their revenues**. However, this number could be greater in states where changes in WOTUS—combined with a lack of state protections—could significantly impact demand for non-perennial stream credits.

The Restoration Economy is Resilient

While there will be disruptions from the Court decision, stakeholders in the restoration economy have noted that **“we’ve seen this before.” The definition of WOTUS has changed multiple times over the decades**, and both restoration providers and the regulated community have adapted. Headlines may indicate the sky is falling down and some restoration providers may be hard-hit, but overall the impact will be low. The ripple effect on the restoration economy is expected to be swift, going into effect just months after the ruling, but the process may be jarring as everyone—federal, state regulators, restoration providers, investors in the restoration economy—puts ‘resilience’ into practice.

About EPIC

The Restoration Economy Center, housed in the national nonprofit Environmental Policy Innovation Center (EPIC), aims to increase the scale and speed of high-quality, equitable restoration outcomes through policy change.

The mission of EPIC is to build policies that deliver spectacular improvement in the speed and scale of conservation. EPIC focuses on a narrow set of strategies:

- Improving policies that allow private sector funding or stewardship to expand or supplant public or charitable conservation work
- Transforming government policies to focus on what matters—outcomes
- Eliminating the organizational barriers that prevent public agencies from adapting to 21st century solutions

We believe that innovation and speed are central to broadening efforts to conserve wildlife, to restore special natural places, and to deliver to people and nature the clean water they need to thrive. To achieve those goals, conservation programs must evolve to accommodate our modern understanding of human behavior and incentives and the challenges posed by humanity’s expanding footprint. We embrace experimentation with novel ideas in conservation policy, to learn quickly from mistakes and iteratively design effective approaches to be even more successful.

EPIC is a fiscally sponsored project of Sand County Foundation. Sand County Foundation is a non-profit conservation organization dedicated to working with private landowners across North America to advance ethical and scientifically sound land management practices that benefit the environment.

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